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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,218	04/15/2004	Paolo C. Trubiano	3085.ENC	1170
7590 08/02/2006			EXAMINER	
Karen G. Kaiser			SAUCIER, SANDRA E	
NATIONAL ST	ARCH AND CHEMICA	L COMPANY		
10 Finderne Avenue			ART UNIT	PAPER NUMBER
Bridgewater, NJ 08807-0500			1651	
			DATE MAILED: 08/02/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/826,218	TRUBIANO ET AL.				
Office Action Summary	Examiner	Art Unit				
•		1651				
The MAILING DATE of this communication app	Sandra Saucier					
Period for Reply		•				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D.  Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timwill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	I.  lety filed  the mailing date of this communication.  D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 26 June 1	Responsive to communication(s) filed on <u>26 June 2006</u> .					
, <del>_</del>	•—					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-21</u> is/are pending in the application.						
4a) Of the above claim(s) <u>18-21</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
	Claim(s) <u>1-17</u> is/are rejected.					
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.						
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Application Papers						
9) The specification is objected to by the Examine						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date						
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ul>		atent Application (PTO-152)				

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## **DETAILED ACTION**

Claims 1-21 are pending. Claims 1-17 are considered on the merits. Claims 18-21 are withdrawn from consideration as being drawn to a non-elected invention.

## Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/26/06 has been entered.

## Claim Rejections - 35 USC § 103

Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1 213 013 [N] in combination with US 5,935,826 [C] or US 5,185,176 [A].

The claims are directed to a composition comprising an active agent encapsulated in a mixture consisting of a soluble starch derivative which has been derivativized to contain at least a hydrophobic group, and has been degraded by an exoenzyme, wherein the protein is a casein or a soy protein.

EP 1 213 013 discloses the use of casein or soya protein as well as other proteins, to incorporate water insoluble active substances (abstract, page 12, lines 1-18). Also included in the mixture can be starches modified with OSA [0111].

US 5,935,826 disclose the instant starch which has been modified by chemical means (derivativized by octenylsuccinic anhydride to introduce hydrophobicity) and modified by use of  $\beta$ -amylase. Also disclosed is the high level of oxygen resistance (col. 7, l. 23).

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US 5,185,176 discloses a water soluble starch which has been degraded by  $\beta$ -amylase and derivativized with OSA which is useful as an emulsifier for oils. Improved shelf stability is obtained with use of this starch derivative.

The substitution of the starch disclosed in US 5,935,826 or US 5,185,176 for the starch in the composition disclosed in EP 1 213 013 would have been obvious because EP '013 suggests the incorporation of modified starches, especially OSA modified starches in a oil-protein composition and such modified starches are taught by US 5,935,826 or US 5,185,176 and have known properties of providing excellent oxidation resistance and high loading of oils, and improved shelf life to a composition.

With regard to quantities or ratios of components, these are considered to be routine optimization in the absence of evidence to the contrary.

One of ordinary skill in the art would have been motivated at the time of invention to make this substitution in order to obtain the resulting composition as suggested by the references with a reasonable expectation of success. The claimed subject matter fails to patentably distinguish over the state of the art as represented by the cited references. Therefore, the claims are properly rejected under 35 U.S.C. § 103.

## Conclusion

Applicant should specifically point out the support for any amendments made to the disclosure, including the claims (MPEP 714.02 and 2163.06). Due to the procedure outlined in MPEP 2163.06 for interpreting claims, it is noted that other art may be applicable under 35 USC 102 or 35 USC 103(a) once the aforementioned issue(s) is/are addressed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra Saucier whose telephone number is (571) 272-0922. The examiner can normally be reached on Monday, Tuesday, Wednesday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, M. Wityshyn can be reached on (571) 272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sandra Saucier

**Primary Examiner** 

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8/1/06